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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/555,921 06/06/00 KAUFHOLD

W MD-5726/LEA

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IM22/0403

EXAMINER

SERGEANT, R

ART UNIT

PAPER NUMBER

1711

DATE MAILED:

04/03/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/555,921

Applicant(s)  
Kaufhold et al.

Examiner  
Rabon Sergeant

Group Art Unit  
1711



☒ Responsive to communication(s) filed on Dec 11, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-5, 7, and 9 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-5, 7, and 9 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-5, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kirchmeyer et al ('252) or Ullrich et al ('679).

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Patentees disclose the continuous production of polyurethane elastomers, wherein the reactant components are rapidly mixed prior to reaction or at an early stage of the reaction, so as to obtain more uniform mixing and reaction. Kirchmeyer et al disclose the use of a double screw extruder and Ullrich et al. disclose the use of static mixers. Though patentees are silent regarding the temperatures of the reaction constituents, prior to their entry into the mixer, the position is taken that the initial processing temperatures were within the temperature difference range for the components of the claims. This position is logical because introduction of reactants into processing equipment at comparable temperatures was an accepted and conventional processing technique at the time of invention. Furthermore, holding or storing reactants at room temperature prior to processing is a universal, economically desirable practice, and it is noted that such a practice meets the process/temperature requirements of the claims.

3. Claims 1-5, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirchmeyer et al ('252) or Ullrich et al ('679), each in view of Rausch et al ('964).

The primary references disclose the continuous production of polyurethane elastomers, wherein the reactant components are rapidly mixed prior to reaction or at an early stage of the reaction, so as to obtain more uniform mixing and reaction. Kirchmeyer et al. disclose the use of a double screw extruder and Ullrich et al. disclose the use of static mixers.

4. While neither of the primary references disclose the use of reactant streams having comparable temperatures, the use of comparable temperatures for reactant streams used for the continuous production of thermoplastic polyurethanes was a known and conventional practice at

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the time of invention. The examples of Rausch et al. clearly disclose that the two reactant streams were heated to the same temperature of 140°F (60°C).


5. Therefore, in accordance with the goals, of the primary references, of obtaining more uniform and homogeneous mixtures, the position is taken that one would have been motivated to introduce the streams for mixing at comparable temperatures (as was done in the secondary reference), so as to arrive at the instant invention.

6. The examiner has considered applicants' response; however, the position is maintained that it would have been obvious to utilize reactant streams at equivalent temperatures for the aforementioned reasons. The teachings of the secondary reference concerning the temperatures of reactant feed streams is simply considered to be representative of common processing techniques within the art. Applicants have not established that the reactant streams of the prior art are outside of the claimed temperature difference range. Since the examiner has set forth reasonable rationale as to why the temperatures of prior art streams would have been expected to be equivalent, it would seem that applicants would have to provide evidence or reason that the temperatures of the streams were outside of the claimed range, in order for the experimental data to be commensurate with the prior art.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

Sergent/nt

3-23-01

  
**RABON SERGENT**  
**PRIMARY EXAMINER**